## COYOTE STEALS SNOW GOOSE FROM BALD EAGLES

by Stephen D. Parris° Erwin E. Klaas Ruth A. Wilson°° Iowa Cooperative Wildlife Research Unit Iowa State University Ames, Iowa 50011

All the larger African carnivores, except the cheetah, steal meat from others at one time or another (Curio 1976). There are also numerous accounts of birds stealing from other birds (kleptoparasitism), and at least 12 species of birds are known to have stolen food from mammals (Brockmann and Bernard 1979). However, we have been unable to find any accounts in the literature of mammals robbing birds. In November 1977 two of us (SDP and RAW) witnessed such an incident at DeSoto National Wildlife Refuge located on the Missouri River in Harrison County, Iowa, and Washington County, Nebras-ka

Shortly after dawn on 12 November we were watching with spotting scopes a group of about 30,000 of the Snow Goose (Anser caerulescens caerulescens) feeding in a harvested cornfield. At about 0700 the geese had flown from the refuge lake to the cornfield, a distance of about 1 km. At 0715 the flock arose en masse, circled a few times, and flew off. We then noticed 5 immature Bald Eagle (Haliaeetus leucocephalus) standing where the geese had been feeding. Among the eagles was a mature Snow Goose (blue phase plumage) obviously disabled and unable to fly or walk. The eagles maintained varying distances from the goose, from a minimum of about 2 m to a maximum of about 30 m. We had not seen the eagles earlier, perhaps partly because of poor light conditions. We assumed the eagles came from a grove of trees about 500 m away where eagles commonly roosted although we did not see their approach.

At 0730 a coyote (Canis latrans) approached the group across the open field. The coyote picked up the goose, which was still alive, and moved 200–250 m to an area near tall grass and unharvested grain. The coyote then dropped the goose, which appeared to be dead. A second coyote emerged from the tall vegetation, picked up the goose, and disappeared into the vegetation. There was no obvious behavioral interaction between the coyotes during the transfer of the goose, and they did not approach each other closer than 5 m.

At 0734 the first coyote again approached the group of eagles. Three took flight and began to dive at the coyote. Whenever they flew close, the coyote lunged and snapped at the eagles. The coyote soon began a series of nose-to-the-ground searching movements in the area where the goose had previously been captured. There was no apparent interaction between the coyote and the two eagles remaining on the ground. At 0737 the coyote moved briefly to the tall vegetation but soon returned and continued its

<sup>\*</sup>Present address: U.S. Army Engineers Waterways Experiment Station, Environmental Laboratory, Box 631, Vicksburg, Mississippi 31980.

<sup>\*\*</sup>Present address: Oregon Cooperative Wildlife Research Unit, Oregon State University, Corvallis, Oregon 97331.

searching in the cornfield. The eagles in the field then took flight and left the area. At 0742 the coyote returned to the tall vegetation and disappeared. We searched the tall vegetation on foot but found no trace of the goose.

Since we were unable to recover the remains of the goose, it was impossible to determine whether the goose was initially disabled by the eagles. However, we believe that this is what happened because the goose had flown from the lake to the field; no geese were in the field prior to 0700. Geese do not remain in fields overnight at DeSoto Refuge because of harassment and possible predation by coyotes. Sick or crippled geese that cannot reach the safety of the lake are soon scavenged by coyotes.

Although Bald Eagles are seldom seen taking healthy waterfowl, Bent (1938) reported that waterfowl are important in the diet of Bald Eagles in certain seasons. Brewster (1880) and Meinertzhagen (1959) also reported that Bald Eagles attack waterfowl, including wild geese, in flight and on water. One of us (EEK) observed an immature Bald Eagle kill a live female Mallard (Anas platyrhynchos) that was loafing on the shore of the frozen refuge lake with a flock of about 100 on 26 December 1977. The eagle approached the ducks by gliding along the shoreline about 2 m above the ground. Presumably, this low-level flight allowed the eagle to surprise its prey without being silhouetted against the sky. The eagles undoubtedly approached the geese with a similar low-level flight pattern that also eluded the notice of the human observers.

We have observed that snow geese usually take flight when an eagle (or airplane) flies overhead. Such behavior may be conditioned by repeated threats from avian predators. Bald Eagles are common at DeSoto Refuge during fall and winter, and coyotes are common as permanent residents. Both coyotes and eagles feed extensively on carcasses of geese and other waterfowl that die from gunshot wounds or disease. Ordinarily, eagles are diurnal feeders, and coyotes are usually nocturnal. Interactions between the two are uncommon. Thus, this kleptoparasitic act was probably a chance encounter in which the coyote capitalized on a fortuitous feeding opportunity.

## Literature Cited

Bent, A. C. 1937. Life histories of North American birds of prey. Part I. U.S. Nat. Mus. Bull. 167:1-409.

Brewster, W. 1880. Prowess of the Bald Eagle (Haliaetus leucocephalus). Bull. Nuttall Ornith. Club 5(1):57–58.

Brockmann, H. J., and C. J. Barnard. 1979. Kleptoparasitism in birds. Anim. Behav. 27:487–514.

Curio, E. 1976. The ethology of predation. Springer-Verlag, Berlin, Heidelberg, New York. 250 pp.

Meinertzhagen, Col. R. 1959. Pirates and predators. Oliver and Boyd, Edinburgh. 230 pp.

<sup>\*</sup>Ed. Note: Bald Eagles certainly do take numbers of healthy waterfowl, including geese, and waterfowl-sized sea birds in the Aleutian Islands; see Sherrod S. K., C. M. White, and F. S. C. Williamson, *Living Bird* 15:143–182, 1977.